

What is claimed is:

1. A folded sheet metal fastener comprising:

5 a top section having a top engageable continuous hole; and

a bottom section having a bottom engageable continuous
hole, substantially coaxial with the top engageable continuous hole;

10 the top section and the bottom section being connected by a
left section and a right section, the left section comprising a left snapping
segment, and the right section comprising a right snapping segment.
2. A fastener as defined in claim 1, wherein the bottom
15 section comprises bottom extensions.
3. A fastener as defined in claim 1, wherein the top
section is substantially parallel to the bottom section, and has smaller
dimensions than said bottom section.
20
4. A fastener as defined in claim 2, wherein the top
section is substantially parallel to the bottom section, and has smaller
dimensions than said bottom section.
- 25 5. A fastener as defined in claim 1, wherein the bottom
section comprises an overbent, and the right section comprises an
underbent, the overbent and the underbent overlapping each other in a
manner that the overbent is on top of the underbent.

6. A fastener as defined in claim 2, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

5

7. A fastener as defined in claim 3, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

10

8. A fastener as defined in claim 4, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

15

9. A fastener as defined in claim 1, wherein the bottom section comprises a positioning tab.

10. A fastener as defined in claim 2, wherein the bottom section comprises a positioning tab.

20

11. A fastener as defined in claim 4, wherein the bottom section comprises a positioning tab.

25

12. A fastener as defined in claim 6, wherein the bottom section comprises a positioning tab.

13. A fastener as defined in claim 1, wherein the snapping segments have bents directing part of said snapping segments inwardly.

14. A fastener as defined in claim 2, wherein the snapping segments have bents directing part of said snapping segments inwardly.

5 15. A fastener as defined in claim 3, wherein the snapping segments have bents directing part of said snapping segments inwardly.

16. A fastener as defined in claim 4, wherein the snapping segments have bents directing part of said snapping segments inwardly.

10

17. A fastener as defined in claim 6, wherein the snapping segments have bents directing part of said snapping segments inwardly.

18. A fastener as defined in claim 1, further comprising an
15 under bottom section, the under bottom section being a bent continuation of the right section and comprising an under bottom engageable continuous hole, the under bottom engageable continuous hole being substantially coaxial with the top engageable continuous hole and the bottom engageable continuous hole.

20

19. A fastener as defined in claim 18, wherein the under bottom section comprises an element selected from under bottom positioning tab, under bottom extensions, and a combination thereof.

25 20. A fastener as defined in claim 18, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section and said under bottom section.

21. A fastener as defined in claim 1, wherein part of the

right section is bent forming an inwardly folded portion, the inwardly folded portion comprising an under top engageable continuous hole, which continuous hole is substantially coaxial with the top engageable continuous hole and the bottom engageable continuous hole.

5

22. A fastener as defined in claim 21, wherein the bottom section comprises bottom extensions.

23. A fastener as defined in claim 22, wherein the top
10 section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section and said under bottom section.

24. A fastener as defined in claim 23, wherein the top
15 section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section and said under bottom section.

25. A fastener as defined in claim 21, wherein the left section comprises a support tub on top of the inwardly folded portion.

20 26. A fastener as defined in claim 25, wherein the bottom section comprises bottom extensions.

27. A fastener as defined in claim 26, wherein the top
25 section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

28. A fastener as defined in claim 27, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a

manner that the overbent is on top of the underbent.

29. A fastener as defined in claim 1, wherein the left snapping segment comprises a left side slot, and the right snapping
5 segment comprises a right side slot.

30. A fastener as defined in claim 29, wherein the bottom section comprises bottom extensions.

10 31. A fastener as defined in claim 30, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

32. A fastener as defined in claim 31, wherein the bottom
15 section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

33. A fastener as defined in claim 1, further comprising an
20 additional engageable continuous hole at the top section, and an additional engageable continuous hole at the bottom section, the two additional engageable continuous holes being substantially coaxial with each other.

34. A fastener as defined in claim 33, wherein the bottom
25 section comprises bottom extensions.

35. A fastener as defined in claim 34, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

36. A fastener as defined in claim 35, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

37. A fastener as defined in claim 1, further comprising an expansion panel on top of the bottom section, the expansion panel comprising an over bottom engageable continuous hole, the over bottom engageable continuous hole being substantially coaxial with the bottom engageable continuous hole and the top engageable continuous hole.

38. A fastener as defined in claim 1, further comprising an elastic body surrounding the bottom section.

39. A fastener as defined in claim 38, wherein the bottom section comprises bottom extensions.

40. A fastener as defined in claim 39, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

41. A fastener as defined in claim 39, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

42. A fastener as defined in claim 40, wherein the bottom section comprises an overbent, and the right section comprises an

underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

43. A fastener as defined in claim 41, wherein the
5 overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

44. A fastener as defined in claim 42, wherein the
10 overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

45. A fastener as defined in claim 5, wherein the overbent
15 comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

46. A fastener as defined in claim 6, wherein the overbent
20 comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

47. A fastener as defined in claim 7, wherein the overbent
25 comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

48. A fastener as defined in claim 8, wherein the overbent

comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

5 49. A vehicle comprising objects connected with a folded sheet metal fastener, the fastener comprising:

 a top section having a top engageable continuous hole; and

10 a bottom section having a bottom engageable continuous hole, substantially coaxial with the top engageable continuous hole;

 the top section and the bottom section being connected by a left section and a right section, the left section comprising a left snapping
15 segment, and the right section comprising a right snapping segment.

 50. A vehicle as defined in claim 49, wherein the bottom section comprises bottom extensions.

20 51. A vehicle as defined in claim 49, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

 52. A vehicle as defined in claim 50, wherein the top
25 section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

 53. A vehicle as defined in claim 49, wherein the bottom section comprises an overbent, and the right section comprises an

underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

54. A vehicle as defined in claim 50, wherein the bottom
5 section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

55. A vehicle as defined in claim 51, wherein the bottom
10 section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

56. A vehicle as defined in claim 52, wherein the bottom
15 section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

57. A vehicle as defined in claim 49, wherein the bottom
20 section comprises a positioning tab.

58. A vehicle as defined in claim 50, wherein the bottom section comprises a positioning tab.

25 59. A vehicle as defined in claim 52, wherein the bottom section comprises a positioning tab.

60. A vehicle as defined in claim 54, wherein the bottom section comprises a positioning tab.

61. A vehicle as defined in claim 49, wherein the snapping segments have bents directing part of said snapping segments inwardly.

5 62. A vehicle as defined in claim 50, wherein the snapping segments have bents directing part of said snapping segments inwardly.

63. A vehicle as defined in claim 51, wherein the snapping segments have bents directing part of said snapping segments inwardly.

10

64. A vehicle as defined in claim 52, wherein the snapping segments have bents directing part of said snapping segments inwardly.

15 65. A vehicle as defined in claim 54, wherein the snapping segments have bents directing part of said snapping segments inwardly.

66. A vehicle as defined in claim 49, wherein the fastener further comprises an under bottom section, the under bottom section being a bent continuation of the right section and comprising an under bottom engageable continuous hole, the under bottom engageable continuous hole being substantially coaxial with the top engageable continuous hole and the bottom engageable continuous hole.

20

67. A vehicle as defined in claim 66, wherein the under bottom section comprises an element selected from under bottom positioning tab, under bottom extensions, and a combination thereof.

25

68. A vehicle as defined in claim 66, wherein the top section is substantially parallel to the bottom section, and has smaller

dimensions than said bottom section and said under bottom section.

69. A vehicle as defined in claim 49, wherein part of the right section is bent forming an inwardly folded portion, the inwardly folded
5 portion comprising an under top engageable continuous hole, which continuous hole is substantially coaxial with the top engageable continuous hole and the bottom engageable continuous hole.

70. A vehicle as defined in claim 69, wherein the bottom
10 section comprises bottom extensions.

71. A vehicle as defined in claim 70, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

15 72. A vehicle as defined in claim 71, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

20 73. A vehicle as defined in claim 69, wherein the left section comprises a support tub on top of the inwardly folded portion.

74. A vehicle as defined in claim 73, wherein the bottom
25 section comprises bottom extensions.

75. A vehicle as defined in claim 74, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

76. A vehicle as defined in claim 75, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

77. A vehicle as defined in claim 49, wherein the left snapping segment comprises a left side slot, and the right snapping segment comprises a right side slot.

10

78. A vehicle as defined in claim 77, wherein the bottom section comprises bottom extensions.

79. A vehicle as defined in claim 78, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

80. A vehicle as defined in claim 79, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

81. A vehicle as defined in claim 49, wherein the fastener further comprises an additional engageable continuous hole at the top section, and an additional engageable continuous hole at the bottom section, the two additional engageable continuous holes being substantially coaxial with each other.

82. A vehicle as defined in claim 81, wherein the bottom

section comprises bottom extensions.

83. A vehicle as defined in claim 82, wherein the top section is substantially parallel to the bottom section, and has smaller
5 dimensions than said bottom section.

84. A vehicle as defined in claim 83, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a
10 manner that the overbent is on top of the underbent.

85. A vehicle as defined in claim 49, wherein the fastener further comprises an expansion panel on top of the bottom section, the expansion panel comprising an over bottom engageable continuous hole,
15 the over bottom engageable continuous hole being substantially coaxial with the bottom engageable continuous hole and the top engageable continuous hole.

86. A vehicle as defined in claim 49, wherein the fastener
20 further comprises an elastic body surrounding the bottom section.

87. A vehicle as defined in claim 86, wherein the bottom section comprises bottom extensions.

25 88. A vehicle as defined in claim 87, wherein the top section is substantially parallel to the bottom section, and has smaller dimensions than said bottom section.

89. A vehicle as defined in claim 87, wherein the bottom

section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

5 90. A vehicle as defined in claim 88, wherein the bottom section comprises an overbent, and the right section comprises an underbent, the overbent and the underbent overlapping each other in a manner that the overbent is on top of the underbent.

10 91. A vehicle as defined in claim 89, wherein the overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

15 92. A vehicle as defined in claim 90, wherein the overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

20 93. A vehicle as defined in claim 53, wherein the overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

25 94. A vehicle as defined in claim 54, wherein the overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

95. A vehicle as defined in claim 55, wherein the overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

5

96. A vehicle as defined in claim 56, wherein the overbent comprises bottom slots and the underbent comprises respective tabs, which tabs are passed through the bottom slots, thereby locking the overbent on the underbent.

10

97. A major portion of a non-integral sheet metal fastener comprising:

a top section having a top engageable continuous hole;

15

a left side section integrally connected to the top section, comprising a left snapping segment and a left underbent under the left snapping segment; and

20

a right section opposite to the left section integrally connected to the top section, comprising a right snapping segment and a right underbent under the right snapping segment.

98. A major portion of a sheet metal fastener as defined in claim 97, wherein the side sections comprise barbs over the underbents.

25

99. A major portion of a sheet metal fastener as defined in claim 97, wherein the underbents comprise inclined tabs toward the respective side sections.

100. A major portion of a sheet metal fastener as defined in claim 98, wherein the underbents comprise inclined tabs toward the respective side sections.

5

101. A major portion of a sheet metal fastener as defined in claim 97, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

10

102. A major portion of a sheet metal fastener as defined in claim 98, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

15

103. A major portion of a sheet metal fastener as defined in claim 99, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

20

104. A major portion of a sheet metal fastener as defined in claim 100, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

25

105. A sheet metal fastener comprising:

a major portion comprising

a top section having a top engageable continuous hole;

5 a left side section integrally connected to the top section, comprising a left snapping segment and a left underbent under the left snapping segment; and

10 a right section opposite to the left section integrally connected to the top section, comprising a right snapping segment and a right underbent under the right snapping segment; and

15 a bottom section having a bottom engageable continuous hole, substantially coaxial with the top engageable continuous hole, the bottom section disposed on top of the left underbent and the right underbent.

20 106. A sheet metal fastener as defined in claim 105, wherein the side sections comprise barbs over the underbents.

107. A sheet metal fastener as defined in claim 105, wherein the underbents comprise inclined tabs toward the respective side sections.

25 108. A sheet metal fastener as defined in claim 106, wherein the underbents comprise inclined tabs toward the respective side sections.

109. A sheet metal fastener as defined in claim 105, further

comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

5 110. A sheet metal fastener as defined in claim 106, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

10 111. A sheet metal fastener as defined in claim 107, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

15 112. A sheet metal fastener as defined in claim 108, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

20 113. A sheet metal fastener as defined in claim 1, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

25 114. A sheet metal fastener as defined in claim 2, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

115. A sheet metal fastener as defined in claim 3, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

5

116. A sheet metal fastener as defined in claim 5, further comprising frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

10

117. A vehicle comprising a major portion of a non-integral sheet metal fastener, the major portion comprising

a top section having a top engageable continuous hole;

15

a left side section integrally connected to the top section, comprising a left snapping segment and a left underbent under the left snapping segment; and

20

a right section opposite to the left section integrally connected to the top section, comprising a right snapping segment and a right underbent under the right snapping segment.

25

118. A vehicle as defined in claim 177, wherein the side sections comprise barbs over the underbents.

119. A vehicle as defined in claim 177, wherein the underbents comprise inclined tabs toward the respective side sections.

120. A vehicle as defined in claim 118, wherein the underbents comprise inclined tabs toward the respective side sections.

121. A vehicle as defined in claim 117, wherein the major
5 portion further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

122. A vehicle as defined in claim 118, wherein the major
10 portion further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

123. A vehicle as defined in claim 119, wherein the major
15 portion further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

124. A vehicle as defined in claim 120, wherein the major
20 portion further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

125. A vehicle comprising elements connected with a non-
25 integral sheet metal fastener comprising:

a major portion, the major portion comprising:

a top section having a top engageable continuous

hole;

5 a left side section integrally connected to the top
section, comprising a left snapping segment and a left underbent
under the left snapping segment; and

10 a right section opposite to the left section integrally
connected to the top section, comprising a right snapping segment
and a right underbent under the right snapping segment; and

15 a bottom section having a bottom engageable continuous
hole, substantially coaxial with the top engageable continuous hole, the
bottom section disposed on top of the left underbent and the right
underbent.

126. A vehicle as defined in claim 125, wherein the side
sections comprise barbs over the underbents.

20 127. A vehicle as defined in claim 125, wherein the
underbents comprise inclined tabs toward the respective side sections.

128. A vehicle as defined in claim 126, wherein the
underbents comprise inclined tabs toward the respective side sections.

25 129. A vehicle as defined in claim 125, wherein the major
portion of the fastener further comprises frictional sections which frictionally
hinder a screw or bolt passing through said frictional section and the
engageable continuous hole from turning.

130. A vehicle as defined in claim 126, wherein the major portion of the fastener further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

5

131. A vehicle as defined in claim 127, wherein the major portion of the fastener further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

10

132. A vehicle as defined in claim 128, wherein the major portion of the fastener further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

15

133. A vehicle as defined in claim 49, wherein the major portion of the fastener further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

20

134. A vehicle as defined in claim 50, wherein the major portion of the fastener further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

25

135. A vehicle as defined in claim 51, wherein the major portion of the fastener further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

136. A vehicle as defined in claim 53, wherein the major portion of the fastener further comprises frictional sections which frictionally hinder a screw or bolt passing through said frictional section and the engageable continuous hole from turning.

137. A folded sheet metal fastener comprising:

an upper free-ended top section having an upper top engageable continuous hole;

a lower free-ended top section having a lower top engageable continuous hole;

a bottom section having a bottom engageable continuous hole; and

a left section and a right section;

the top sections and the bottom section being connected by the left section and the right section, the left section comprising a left snapping segment, and the right section comprising a right snapping segment, wherein the upper top engageable hole, the lower top engageable hole, and the bottom engageable hole are located in positions allowing coexisting engagement by a screw or bolt.

138. A fastener as defined in claim 137, further comprising a guiding sector between the bottom engageable continuous hole and the lower top engageable continuous hole for directing the screw or bolt from

said bottom engageable continuous hole to said lower top engageable continuous hole.

139. A fastener as defined in claim 138, wherein the
5 guiding sector comprises an element selected from guiding sub-sectors leaning against each other, a sub-sector having a non-engageable hole through which the screw or bolt can be guided, a sub-sector having an engageable hole through which the screw or bolt can be guided, an engageable extrusion hole through which the screw or bolt can be guided,
10 a non-engageable extrusion hole through which the screw or bolt can be guided, and a combination thereof.

140. A fastener as defined in claim 139, wherein the
15 guiding sub-sectors leaning against each other have reinforcing base disposed between said sub-sectors and the bottom section.

141. A fastener as defined in claim 137, wherein at least
one of the snapping segments comprises a portion selected from an anti-opening portion, an anti-sliding portion, and a combination thereof.
20

142. A fastener as defined in claim 138, wherein at least
one of the snapping segments comprises a portion selected from an anti-opening portion, an anti-sliding portion, and a combination thereof.

25 143. A fastener as defined in claim 140, wherein at least
one of the snapping segments comprises a portion selected from an anti-opening portion, an anti-sliding portion, and a combination thereof.

144. A fastener as defined in claim 137, wherein the upper free-ended top section and the lower free-ended top section have smaller dimensions than the bottom section.

5 145. A fastener as defined in claim 138, wherein the upper free-ended top section and the lower free-ended top section have smaller dimensions than the bottom section.

10 146. A fastener as defined in claim 140, wherein the upper free-ended top section and the lower free-ended top section have smaller dimensions than the bottom section.

15 147. A fastener as defined in claim 143, wherein the upper free-ended top section and the lower free-ended top section have smaller dimensions than the bottom section.

148. A fastener as defined in claim 137, wherein the upper free-ended top section and the lower free-ended top section are just wide enough to accept the upper top engageable continuous hole, and the
20 lower top engageable continuous hole, respectively.

149. A fastener as defined in claim 138, wherein the upper free-ended top section and the lower free-ended top section are just wide enough to accept the upper top engageable continuous hole, and the
25 lower top engageable continuous hole, respectively.

150. A fastener as defined in claim 137, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole

are in a condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve prevailing torque.

5 151. A fastener as defined in claim 138, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole are in a condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve
10 prevailing torque.

 152. A fastener as defined in claim 140, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole
15 are in a condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve prevailing torque.

 153. A fastener as defined in claim 143, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole
20 are in a condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve prevailing torque.

25 154. A fastener as defined in claim 147, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole are in a condition selected from deviating from being commensurate,

being misaligned, and a combination thereof, in a manner to improve prevailing torque.

158. A folded sheet metal fastener comprising:

5

a bottom section having a bottom engageable continuous hole;

a left side section connected to the bottom section and
10 comprising a left snapping segment; and

a right side section opposite the left side section also connected to the bottom and comprising a right snapping segment;

15 wherein at least one of the left and right snapping segments comprise an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

20 159. A vehicle comprising objects connected with a folded sheet metal fastener, the fastener comprising:

a bottom section having a bottom engageable continuous hole;

25

a left side section connected to the bottom section and comprising a left snapping segment; and

a right side section opposite the left side section also

connected to the bottom and comprising a right snapping segment;

wherein at least one of the left and right snapping segments
comprise an element selected from an anti-opening portion, an anti-sliding
5 portion and a combination thereof.

160. A vehicle as defined in claim 159, wherein the fastener
further comprises a guiding sector between the bottom engageable
continuous hole and the lower top engageable continuous hole for
10 directing the screw or bolt from said bottom engageable continuous hole to
said lower top engageable continuous hole.

161. A vehicle as defined in claim 160, wherein the guiding
sector comprises an element selected from guiding sub-sectors leaning
15 against each other, a sub-sector having a non-engageable hole through
which the screw or bolt can be guided, a sub-sector having an engageable
hole through which the screw or bolt can be guided, an engageable
extrusion hole through which the screw or bolt can be guided, a non-
engageable extrusion hole through which the screw or bolt can be guided,
20 and a combination thereof.

162. A vehicle as defined in claim 161, wherein the guiding
sub-sectors leaning against each other have reinforcing base disposed
between said sub-sectors and the bottom section.
25

163. A vehicle as defined in claim 159, wherein at least one
of the snapping segments comprises an element selected from an anti-
opening portion, an anti-sliding portion and a combination thereof.

164. A vehicle as defined in claim 160, wherein at least one of the snapping segments comprises an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

5 165. A vehicle as defined in claim 162, wherein at least one of the snapping segments comprises an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

166. A vehicle as defined in claim 159, wherein the upper
10 free-ended top section and the lower free-ended top section have smaller dimensions than the bottom section.

167. A vehicle as defined in claim 160, wherein the upper
15 free-ended top section and the lower free-ended top section have smaller dimensions than the bottom section.

168. A vehicle as defined in claim 162, wherein the upper
free-ended top section and the lower free-ended top section have smaller
dimensions than the bottom section.

20 169. A vehicle as defined in claim 163, wherein the upper free-ended top section and the lower free-ended top section have smaller dimensions than the bottom section.

25 170. A vehicle as defined in claim 159, wherein the upper free-ended top section and the lower free-ended top section are just wide enough to accept the upper top engageable continuous hole, and the lower top engageable continuous hole, respectively.

171. A vehicle as defined in claim 160, wherein the upper free-ended top section and the lower free-ended top section are just wide enough to accept the upper top engageable continuous hole, and the lower top engageable continuous hole, respectively.

5

172. A vehicle as defined in claim 159, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole are in a condition selected from deviating from being commensurate, being
10 misaligned, and a combination thereof, in a manner to improve prevailing torque.

173. A vehicle as defined in claim 160, wherein at least two of the upper top engageable continuous hole, the lower top engageable
15 continuous hole, and the bottom engageable continuous hole are in a condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve prevailing torque.

20 174. A vehicle as defined in claim 162, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole are in a condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve prevailing
25 torque.

175. A vehicle as defined in claim 165, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole are in a

condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve prevailing torque.

5 176. A vehicle as defined in claim 169, wherein at least two of the upper top engageable continuous hole, the lower top engageable continuous hole, and the bottom engageable continuous hole are in a condition selected from deviating from being commensurate, being misaligned, and a combination thereof, in a manner to improve prevailing
10 torque.

177. A folded sheet metal fastener comprising:

a bottom section having a bottom engageable continuous
15 hole;

a left section connected to the bottom and comprising a left snapping segment, the left snapping segment comprising an element selected from an anti-opening portion, an anti-sliding portion and a
20 combination thereof; and

a right section also connected to the bottom and comprising a right snapping segment, the right snapping segment comprising an element selected from an anti-opening portion, an anti-sliding portion and a
25 combination thereof.

178. A vehicle comprising objects connected with a sheet metal fastener, the sheet metal fastener comprising:

a bottom section having a bottom engageable continuous hole;

a left section connected to the bottom and comprising a left snapping segment, the left snapping segment comprising an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof; and

a right section also connected to the bottom and comprising a right snapping segment, the right snapping segment comprising an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

179. A combination fastener comprising:
a fastener, the fastener comprising

a bottom section having a bottom engageable continuous hole, the bottom engageable continuous hole having a helical periphery;

a left section connected to the bottom and comprising a left snapping segment; and

a right section also connected to the bottom and comprising a right snapping segment; and

a screw, the screw comprising

a core, the core having a core surface, and

a pitch, the pitch being commensurate to the helical
periphery of the bottom engageable continuous hole,
and

5

wherein substantially the entirety of the helical periphery of the bottom
engageable continuous hole substantially contacts the core surface.

10 180. A combination fastener as defined in claim 179, further
comprising a top section having a top engageable continuous hole,
wherein the top section is connected also to the left section and to the right
section.

15 181. A combination fastener as defined in claim 179, further
comprising an

upper free-ended top section having an upper top
engageable continuous hole;

20

a lower free-ended top section having a lower top
engageable continuous hole; and

wherein the upper free-ended top section is connected to one
25 of the left and the right side sections and the lower free-ended top section
is connected to the remaining of the left and the right side sections.

182. A combination fastener as defined in claim 179,
wherein at least one of the left and right snapping segments comprise an

element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

183. A combination fastener as defined in claim 180,
5 wherein at least one of the left and right snapping segments comprise an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

184. A combination fastener as defined in claim 181,
10 wherein at least one of the left and right snapping segments comprise an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

185. A vehicle comprising objects connected with a
15 combination fastener, the combination fastener comprising:

a fastener, the fastener comprising

20 a bottom section having a bottom engageable continuous hole, the bottom engageable continuous hole having a helical periphery;

a left section connected to the bottom and comprising
25 a left snapping segment; and

a right section also connected to the bottom and
comprising a right snapping segment; and

a screw, the screw comprising

a core, the core having a core surface, and

5 a pitch, the pitch being commensurate to the helical
periphery of the bottom engageable continuous hole,
and

wherein substantially the entirety of the helical periphery of the bottom
engageable continuous hole substantially contacts the core surface.

10

186. A vehicle as defined in claim 184, wherein the fastener
further comprises a top section having a top engageable continuous hole,
and wherein the top section is connected to the left section and to the right
section.

15

187. A vehicle as defined in claim 184, wherein the fastener
further comprises

20 an upper free-ended top section having an upper top
engageable continuous hole;

a lower free-ended top section having a lower top
engageable continuous hole; and

25 wherein the upper free-ended top section is connected to one
of the left and the right side sections and the lower free-ended top section
is connected to the remaining of the left and the right side sections.

188. A vehicle as defined in claim 184, wherein at least

one of the left and right snapping segments of the fastener comprise an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

5 189. A vehicle as defined in claim 185, wherein at least one of the left and right snapping segments of the fastener comprise an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

10 190. A vehicle as defined in claim 186, wherein at least one of the left and right snapping segments of the fastener comprise an element selected from an anti-opening portion, an anti-sliding portion and a combination thereof.

15 191. A folded sheet metal fastener comprising:

an upper free-ended top section having an upper top engageable continuous hole;

20 a lower free-ended top section having a lower top engageable continuous hole;

a bottom section having a bottom engageable continuous hole;

25 a left section and a right section, the top sections and the bottom section being connected by the left section and the right section; and

a front snapping segment and a back snapping segment, wherein at least one of said segments is connected to at least one of the upper free-ended top section and the lower free-ended top section, substantially between the planes of left section and the right section.

5

192. A fastener as defined in claim 191, wherein both the front and the back snapping segments are connected to the lower free-ended top section.

10

193. A fastener as defined in claim 191, wherein the upper free-ended top section provides support to the lower free-ended top section.

15

194. A fastener as defined in claim 192, wherein the upper free-ended top section provides support to the lower free-ended top section.

20

195. A fastener as defined in claim 191, wherein both the front and the back snapping segments are connected to the upper free-ended top section.

196. A fastener as defined in claim 195, further comprising side anti-sliding extensions connected to the lower free-ended top section.

25

197. A fastener as defined in claim 191, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

198. A fastener as defined in claim 192, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

5 199. A fastener as defined in claim 193, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

200. A fastener as defined in claim 194, wherein at least
10 one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

201. A fastener as defined in claim 195, wherein at least
15 one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

202. A fastener as defined in claim 196, wherein at least
one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

20

203. A folded sheet metal fastener comprising:

a top section having a top engageable continuous hole;

25

a bottom section having a bottom engageable continuous
hole;

at least one side section, the top section and the bottom

section being connected by the at least one side section; and

a front snapping segment and a back snapping segment, the snapping segments connected to the top section.

5

204. A fastener as defined in claim 193, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

10

205. A vehicle comprising objects connected with a folded sheet metal fastener, the fastener comprising:

an upper free-ended top section having an upper top engageable continuous hole;

15

a lower free-ended top section having a lower top engageable continuous hole;

20

a bottom section having a bottom engageable continuous hole;

a left section and a right section, the top sections and the bottom section being connected by the left section and the right section; and

25

a front snapping segment and a back snapping segment, wherein at least one of said segments is connected to at least one of the upper free-ended top section and the lower free-ended top section, substantially between the planes of left section and the right section.

206. A vehicle as defined in claim 191, wherein both the front and the back snapping segments are connected to the lower free-ended top section.

5

207. A vehicle as defined in claim 191, wherein the upper free-ended top section provides support to the lower free-ended top section.

10

208. A vehicle as defined in claim 192, wherein the upper free-ended top section provides support to the lower free-ended top section.

15

209. A vehicle as defined in claim 191, wherein both the front and the back snapping segments are connected to the upper free-ended top section.

20

210. A vehicle as defined in claim 195, further comprising side anti-sliding extensions connected to the lower free-ended top section.

211. A vehicle as defined in claim 191, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

25

212. A vehicle as defined in claim 192, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

213. A vehicle as defined in claim 193, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

5 214. A vehicle as defined in claim 194, wherein at least one of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

 215. A vehicle as defined in claim 195, wherein at least one
10 of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

 216. A vehicle as defined in claim 196, wherein at least one of the snapping segments comprises a portion selected from anti-opening
15 portion, anti-sliding portion, and a combination thereof.

 217. A vehicle comprising objects connected with a folded sheet metal fastener, the fastener comprising:

20

a top section having a top engageable continuous hole;

a bottom section having a bottom engageable continuous
hole;

25

at least one side section, the top section and the bottom section being connected by the at least one side section; and

a front snapping segment and a back snapping segment, the snapping segments connected to the top section.

218. A vehicle as defined in claim 217, wherein at least one
5 of the snapping segments comprises a portion selected from anti-opening portion, anti-sliding portion, and a combination thereof.

219. A fastener as defined in claim 137, further comprising
an elastic body attached to or molded at least under the bottom section of
10 the sheet metal fastener, the elastic body having an upper side, a lower side, and an edge.

220. A fastener as defined in claim 219, further comprising
holders embedded into the elastic body.

15

221. A fastener as defined in claim 219, wherein the elastic
body further comprises sealing rims at least on one of the upper and lower
side of the elastic body.

20 222. A fastener as defined in claim 220, wherein the elastic
body further comprises sealing rims at least on one of the upper and lower
side of the elastic body.

223. A fastener as defined in claim 222, wherein the elastic
25 body comprises sealing rims on both the upper side and the lower side of
the elastic body, and the sealing rims on the upper side of the elastic body
are arranged to be in alternate positions with respect to the sealing rims on
the lower side of the elastic body.

224. A fastener as defined in claim 223, wherein one of the sealing rims on the top side of the elastic body is closest to the edge of the elastic body than any other sealing rim at the lower side of the elastic body.

5

225. A fastener as defined in claim 219, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

10

226. A fastener as defined in claim 220, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

15

227. A fastener as defined in claim 221, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

20

228. A fastener as defined in claim 222, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

25

229. A fastener as defined in claim 223, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

230. A fastener as defined in claim 224, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

231. A folded sheet metal fastener as defined in claim 141,
wherein the snapping segments comprise a bent, and the anti-sliding
portions comprise an element selected from extension of the snapping
5 segment, barbs on the bent, ridges on the bent, knurls on the bent, and a
combination thereof.

232. A folded sheet metal fastener as defined in claim 158,
wherein the snapping segments comprise a bent, and the anti-sliding
10 portions comprise an element selected from extension of the snapping
segment, barbs on the bent, ridges on the bent, knurls on the bent, and a
combination thereof.

233. A folded sheet metal fastener comprising:
15
an upper free-ended top section having an upper top
engageable continuous hole;
a lower free-ended top section having a lower top hole;
20
a bottom section having a bottom engageable continuous
hole; and
a left section and a right section;
25
the top sections and the bottom section being connected by
the left section and the right section, the left section comprising a left
snapping segment, and the right section comprising a right snapping
segment, wherein the upper top engageable hole, the lower top hole, and

the bottom engageable hole are located in positions allowing coexisting engagement by a screw or bolt.

234. A folded sheet metal fastener as defined in claim 233,
5 wherein the snapping segments comprise a bent, and having a portion selected from anti-opening portion, anti-sliding portion and a combination thereof, the anti-sliding portions comprising an element selected from extension of the snapping segment, barbs on the bent, ridges on the bent, knurls on the bent, and a combination thereof.

10

235. A vehicle comprising objects connected with a folded sheet metal fastener, the folded sheet metal fastener comprising:

an upper free-ended top section having an upper top
15 engageable continuous hole;

a lower free-ended top section having a lower top engageable continuous hole;

20 a bottom section having a bottom engageable continuous hole;

an elastic body attached to or molded at least under the bottom section, the elastic body having an upper side, a lower side, and an
25 edge; and

a left section and a right section;

the top sections and the bottom section being connected by

the left section and the right section, the left section comprising a left snapping segment, and the right section comprising a right snapping segment, wherein the upper top engageable hole, the lower top engageable hole, and the bottom engageable hole are located in positions
5 allowing coexisting engagement by a screw or bolt.

236. A vehicle as defined in claim 235, wherein the fastener further comprises holders embedded into the elastic body.

10 237. A vehicle as defined in claim 235, wherein the elastic body further comprises sealing rims at least on one of the upper and lower side of the elastic body.

238. A vehicle as defined in claim 236, wherein the elastic
15 body further comprises sealing rims at least on one of the upper and lower side of the elastic body.

239. A vehicle as defined in claim 238, wherein the elastic body comprises sealing rims on both the upper side and the lower side of
20 the elastic body, and the sealing rims on the upper side of the elastic body are arranged to be in alternate positions with respect to the sealing rims on the lower side of the elastic body.

240. A vehicle as defined in claim 239, wherein one of the
25 sealing rims on the top side of the elastic body is closest to the edge of the elastic body than any other sealing rim at the lower side of the elastic body.

241. A vehicle as defined in claim 235, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

5 242. A vehicle as defined in claim 236, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

243. A vehicle as defined in claim 237, wherein the elastic
10 body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

244. A vehicle as defined in claim 238, wherein the elastic
15 body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

245. A vehicle as defined in claim 239, wherein the elastic
body further comprises a screw sealing portion in the vicinity of the bottom
engageable continuous hole.

20

246. A vehicle as defined in claim 240, wherein the elastic body further comprises a screw sealing portion in the vicinity of the bottom engageable continuous hole.

25 247. A vehicle as defined in claim 159, wherein the snapping segments comprise a bent, and the anti-sliding portions comprise an element selected from extension of the snapping segment, barbs on the bent, ridges on the bent, knurls on the bent, and a combination thereof.

248. A folded sheet metal fastener comprising:

an upper free-ended top section having an upper top engageable continuous hole;

5

a lower free-ended top section having a lower top hole;

a bottom section having a bottom engageable continuous hole; and

10

a left section and a right section;

the top sections and the bottom section being connected by the left section and the right section, the left section comprising a left snapping segment, and the right section comprising a right snapping segment, wherein the upper top engageable hole, the lower top hole, and the bottom engageable hole are located in positions allowing coexisting engagement by a screw or bolt.

15

20

249. A folded sheet metal fastener as defined in claim 248, wherein the snapping segments comprise a bent, and having a portion selected from anti-opening portion, anti-sliding portion and a combination thereof, the anti-sliding and/or anti-opening portions comprising an element selected from extension of the snapping segment, barbs on the bent, ridges on the bent, knurls on the bent, and a combination thereof.

25

250. A vehicle comprising objects connected with a folded sheet metal fastener, the folded sheet metal fastener comprising:

an upper free-ended top section having an upper top engageable continuous hole;

a lower free-ended top section having a lower top hole;

5

a bottom section having a bottom engageable continuous hole; and

a left section and a right section;

10

the top sections and the bottom section being connected by the left section and the right section, the left section comprising a left snapping segment, and the right section comprising a right snapping segment, wherein the upper top engageable hole, the lower top hole, and
15 the bottom engageable hole are located in positions allowing coexisting engagement by a screw or bolt.